

10/582952

AP3 Rec'd PCT/PTO 15 JUN 2006

PTO/SB/08A (08-03)

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
				Application Number	
				Filing Date	June 15, 2006
				First Named Inventor	Yolande Rouiller
				Art Unit	
				Examiner Name	
Sheet	1	of	4	Attorney Docket Number	ARS-129

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
BL	U1	US-5,705,364	01-06-1998	ETCHEVERRY et al.	All
	U2	US-			
	U3	US-			
	U4	US-			
	U5	US-			
	U6	US-			
	U7	US-			
	U8	US-			

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
BL	F1	WO 00/36092	06-22-2000	BIOGEN, INC.	All
	F2	WO 00/54651 (CD-ROM)	09-21-2000	HUMAN GENOME SCIENCES, INC.	All
	F3	WO 03/046160	06-05-2003	APPLIED RESEARCH SYSTEMS ARS HOLDING N.V.	All
	F4	WO 03/083066	10-09-2003	IMMUNEX CORPORATION	All
	F5	WO 2004/058800 (CD-ROM)	07-15-2004	BRISTOL-MYERS SQUIBB COMPANY	All
	F6				
	F7				

Examiner Signature	larose	Date Considered	9-20-07
--------------------	--------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard T.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

10/582952

AP3 Rec'd PCT/PTO 15 JUN 2006

PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
 STATEMENT BY APPLICANT**
(use as many sheets as necessary)

Sheet

2

of

4

Complete if Known

Application Number	
Filing Date	June 15, 2006
First Named Inventor	Yolande Rouiller
Group Art Unit	
Examiner Name	
Attorney Docket Number	ARS-129

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PL	R1	ALTSCHUL, S.F. et al. "Basic Local Alignment Search Tool", <i>J. Mol. Biol.</i> , 1990, pp. 403-410, Vol. 215.	
	R2	ALTSCHUL, S.F. et al. "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", <i>Nucleic Acids Research</i> , 1997, pp. 3389-3402, Vol. 25, No. 17.	
	R3	ANDERSEN, D.C. et al. "Multiple Cell Culture Factors Can Affect the Glycosylation of Asn-184 in CHO-Produced Tissue-Type Plasminogen Activator", <i>Biotechnology and Bioengineering</i> , October 5, 2000, pp. 25-31, Vol. 70, No. 1.	
	R4	BARNABÉ, N. et al. "Effect of Temperature on Nucleotide Pools and Monoclonal Antibody Production in a Mouse Hybridoma", <i>Biotechnology and Bioengineering</i> , November 20, 1994, pp. 1235-1245, Vol. 44, No. 10.	
	R5	BORYS, M.C. et al. "Culture pH Affects Expression Rates and Glycosylation of Recombinant Mouse Placental Lactogen Proteins by Chinese Hamster Ovary (CHO) Cells", <i>Bio/Technology</i> , June 1993, pp. 720-724, Vol. 11.	
	R6	CASTRO, P.M.L. et al. "The Macroheterogeneity of Recombinant Human Interferon- γ Produced by Chinese-hamster Ovary Cells is Affected by the Protein and Lipid Content of the Culture Medium", <i>Biotechnol. Appl. Biochem.</i> , 1995, pp. 87-100, Vol. 21.	
	R7	CHUPPA, S. et al. "Fermentor Temperature as a Tool for Control of High-Density Perfusion Cultures of Mammalian Cells", <i>Biotechnology and Bioengineering</i> , July 20, 1997, pp. 328-338, Vol. 55, No. 2.	
	R8	DEVEREUX, J. et al. "A Comprehensive Set of Sequence Analysis Programs for the VAX", <i>Nucleic Acids Research</i> , 1984, pp. 387-395, Vol. 12, No. 1.	
	R9	DUCOMMUN, P. et al. "Monitoring of Temperature Effects on Animal Cell Metabolism in a Packed Bed Process", <i>Biotechnology and Bioengineering</i> , March 30, 2002, pp. 838-842, Vol. 77, No. 7.	
	R10	FURUKAWA, K. et al. "Effect of Culture Temperature on a Recombinant CHO Cell Line Producing a C-Terminal α -amidating Enzyme", <i>Cytotechnology</i> , 1998, pp. 153-164, Vol. 26.	
	R11	FURUKAWA, K. et al. "Enhancement of Productivity of Recombinant α -amidating Enzyme by Low Temperature Culture", <i>Cytotechnology</i> , 1999, pp. 85-94, Vol. 31.	
	R12	GAWLITZEK, M. et al. "Ammonium Alters N-Glycan Structures of Recombinant TNFR-IgG: Degradative Versus Biosynthetic Mechanisms", <i>Biotechnology and Bioengineering</i> , June 20, 2000, pp. 637-646, Vol. 68, No. 6.	

Examiner Signature	<i>Darse</i>	Date Considered	9. 20.07
--------------------	--------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

10/582952

APS Rec'd PCT/PTO 15 JUN 2007

07/08B (08-03)

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	
(use as many sheets as necessary)				Filing Date	June 15, 2006
Sheet	3	of	4	First Named Inventor	Yolande Rouiller
				Group Art Unit	
				Examiner Name	
				Attorney Docket Number	ARS-129

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
ML	R13	GOLDMAN, M.H. et al. "Monitoring Proteolysis of Recombinant Human Interferon- γ During Batch Culture of Chinese Hamster Ovary Cells", <i>Cytotechnology</i> , 1997, pp. 103-111, Vol. 23.	
	R14	GRANTHAM, R. "Amino Acid Difference Formula to Help Explain Protein Evolution", <i>Science</i> , September 6, 1974, pp. 862-864, Vol. 185.	
	R15	HARVEY, D.J. "Matrix-assisted Laser Desorption/Ionisation Mass Spectrometry of Oligosaccharides and Glycoconjugates", <i>Journal of Chromatography A</i> , 1996, pp. 429-446, Vol. 720.	
	R16	HENDRICK, V. et al. "Increased Productivity of Recombinant Tissular Plasminogen Activator (t-PA) by Butyrate and Shift of Temperature: a Cell Cycle Phases Analysis", <i>Cytotechnology</i> , 2001, pp. 71-83, Vol. 36.	
	R17	HIRSCHBERG, C.B. et al. "Topography of Glycosylation in the Rough Endoplasmic Reticulum and Golgi Apparatus", <i>Ann. Rev. Biochem.</i> , 1987, pp. 63-87, Vol. 56.	
	R18	JENKINS, N. et al. "Getting the Glycosylation Right: Implications for the Biotechnology Industry", <i>Nature Biotechnology</i> , August 1996, pp. 975-981, Vol. 14.	
	R19	KAUFMANN, H. et al. "Influence of Low Temperature on Productivity, Proteome and Protein Phosphorylation of CHO Cells", <i>Biotechnology and Bioengineering</i> , June 5, 1999, pp. 573-582, Vol. 63, No. 5.	
	R20	KAUFMANN, H. et al. "Comparative Analysis of Two Controlled Proliferation Strategies Regarding Product Quality, Influence on Tetracycline-Regulated Gene Expression, and Productivity", <i>Biotechnology and Bioengineering</i> , March 20, 2001, pp. 592-602, Vol. 72, No. 6.	
	R21	LOETSCHER, H. et al. "Molecular Cloning and Expression of the Human 55 kd Tumor Necrosis Factor Receptor", <i>Cell</i> , April 20, 1990, pp. 351-359, Vol. 161, No. 2.	
	R22	MOORE, A. et al. "Effects of Temperature Shift on Cell Cycle, Apoptosis and Nucleotide Pools in CHO Cell Batch Cultures", <i>Cytotechnology</i> , 1997, pp. 47-54, Vol. 23.	
	R23	MUELLER, P.P. et al. "Recombinant Glycoprotein Product Quality in Proliferation-Controlled BHK-21 Cells", <i>Biotechnology and Bioengineering</i> , December 5, 1999, pp. 529-536, Vol. 65, No. 5.	
C	R24	MUNZERT, E. et al. "Sialidase Activity in Culture Fluid of Chinese Hamster Ovary Cells during Batch Culture and Its Effect on Recombinant Human Antithrombin III Integrity", <i>Biotechnol. Prog.</i> , 1996, pp. 559-563, Vol. 12.	

Examiner Signature	<i>Larsse</i>	Date Considered	9.20.07
--------------------	---------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

10/582952

AP3 Rec'd PCT/PTO 15 JUN 2006

PTO/SB/089 (06-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
 STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

4

of

4

Complete if Known

Application Number	
Filing Date	June 15, 2006
First Named Inventor	Yolande Rouiller
Group Art Unit	
Examiner Name	

Attorney Docket Number ARS-129

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PL	R25	NOPHAR, Y. et al. "Soluble Forms of Tumor Necrosis Factor Receptors (TNF-Rs). The cDNA for the Type I TNF-R, Cloned Using Amino Acid Sequence Data of its Soluble Form, Encodes Both the Cell Surface and a Soluble Form of the Receptor", <i>The EMBO Journal</i> , 1990, pp. 3269-3278, Vol. 9., No. 10.	
	R26	NYBERG, G.B. et al. "Metabolic Effects on Recombinant Interferon- γ Glycosylation in Continuous Culture of Chinese Hamster Ovary Cells", <i>Biotechnology and Bioengineering</i> , February 5, 1999, pp. 336-347, Vol. 62, No. 3.	
	R27	PEARSON, W.R. et al. "Improved Tools for Biological Sequence Comparison", <i>Proc. Natl. Acad. Sci. USA</i> , April 1988, pp. 2444-2448, Vol. 85.	
	R28	PEARSON, W.R. et al. "Rapid and Sensitive Sequence Comparison with FASTP and FASTA", <i>Methods in Enzymology</i> , 1990, pp. 63-98, Vol. 183.	
	R29	SCHALL, T.J. et al. "Molecular Cloning and Expression of a Receptor for Human Tumor Necrosis Factor", <i>Cell</i> , April 20, 1990, pp. 361-370, Vol. 61.	
	R30	SMITH, C.A. et al. "A Receptor for Tumor Necrosis Factor Defines an Unusual Family of Cellular and Viral Proteins", <i>Science</i> , May 25, 1990, pp. 1019-1023, Vol. 248.	
	R31	SMITH, T.F. et al. "Identification of Common Molecular Subsequences", <i>J. Mol. Biol.</i> , 1981, pp. 195-197, Vol. 147.	
	R32	SURESHKUMAR, G.K. et al. "The Influence of Temperature on a Mouse-Mouse Hybridoma Growth and Monoclonal Antibody Production", <i>Biotechnology and Bioengineering</i> , February 1991, pp. 292-295, Vol. 37.	
	R33	WEIDERMANN, R. et al. "Low Temperature Cultivation- A Step Towards Process Optimisation", <i>Cytotechnology</i> , 1994, pp. 111-116, Vol. 15.	
	R34	WERNER, R. G. et al. "Appropriate Mammalian Expression Systems for Biopharmaceuticals", <i>Drug Res.</i> , 1998, pp. 870-880, Vol. 48, No. 8.	
	R35	YANG, M. et al. "Effects of Ammonia on CHO Cell Growth, Erythropoietin Production, and Glycosylation", <i>Biotechnology and Bioengineering</i> , May 20, 2000, pp. 370-380, Vol. 68, No. 4.	
↓	R36	YOON, S.K. et al. "Effect of Low Culture Temperature on Specific Productivity, Transcription Level, and Heterogeneity of Erythropoietin in Chinese Hamster Ovary Cells", <i>Biotechnology and Bioengineering</i> , May 5, 2003, pp. 289-298, Vol. 82, No. 3.	

Examiner Signature	<i>PL</i>	Date Considered	9.20.07
--------------------	-----------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.